



## Goddard Procedures and Guidelines

**DIRECTIVE NO.** GPG 8710.2  
**EFFECTIVE DATE:** April 15, 2004  
**EXPIRATION DATE:** April 15, 2009

**APPROVED BY Signature:** Original Signed by  
**NAME:** A. V. Diaz  
**TITLE:** Director

---

**Responsible Office:** 250 / Safety and Environmental Office

**Title:** Emergency Preparedness Program Plan for Greenbelt

---

### PREFACE

#### P.1 PURPOSE

The purpose of this procedure is to define how emergency preparedness is implemented at Goddard Space Flight Center (GSFC).

#### P.2 APPLICABILITY

This plan applies to all personnel (NASA, contractor, general public, or other government agencies) utilizing or visiting GSFC.

#### P.3 AUTHORITY

- a. Executive Order (EO) 12656, "Assignment of Emergency Preparedness Responsibilities," November 18, 1988.
- b. Federal Preparedness Circular (FPC) 6, "Emergency Succession to Key Positions of Federal Departments and Agencies," May 3, 1984.
- c. Federal Emergency Management Agency, "Federal Response Plan," April 1999.
- d. Federal Emergency Management Agency, "National Mitigation Strategy," October 8, 1996.
- e. [NPD 8710.1](#), Emergency Preparedness Program

#### P.4 REFERENCES

- a. [NPD 1440.6](#), NASA Records Management
- b. [NPG 8715.2](#), Emergency Preparedness Plan Procedures and Guidelines
- c. [NASA-STD-8719.11](#), Safety Standard for Fire Protection
- d. [GSFC Form 23-62](#), Emergency Action Plan
- e. [Safety 1st Web site](#)

#### P.5 CANCELLATION

GMI 1040.6, NASA/Goddard Space Flight Center Emergency Management Plan (Greenbelt Facilities)

## P.6 SAFETY

Facility Operations Managers (FOMs) will prepare Emergency Action Plans (EAPs) for their buildings, using GSFC Form 23-62. All building occupants should be familiar with the content of the applicable EAP. The EAPs can be accessed on the [Safety 1st Web site](#).

## P.7 TRAINING

The Emergency Management Task Group (EMTG) (see 2.4) will work with the Office of Human Resources (OHR) to review training needs and available training courses, so that training is made available to those who need or want it. Records are kept in accordance with Center requirements for training records.

## P.8 RECORDS

Record Title	Record Custodian	Retention
Lists of emergency and critical personnel	Directorate offices	Until updated.
Reports on Drills	EMTG	* <u>NRRS 1/4</u> . Destroy in 3 years, or 1 year after completion of next exercise, whichever comes first.

\*[NPG 1441.1](#) – NASA Records Retention Schedules

## P.9 METRICS

Metrics are discussed in Section 4.

## P.10 DEFINITIONS

- a. Critical Personnel – Personnel who, during an emergency situation, support critical projects, missions, and operations, or are needed to initiate a return to normal operations. See Section 5.
- b. Emergency Action Plan (EAP) – A document prepared using GSFC Form 23-62 that provides emergency information for occupants of all GSFC buildings. An EAP is prepared for each building, and includes the building's emergency evacuation procedures and other emergency information unique to the building.
- c. Emergency Operations Center (EOC) – A specially equipped area that serves as the communications hub and control center from which coordination and control is exercised and maintained for emergency incidents.

- d. Emergency Personnel – Personnel who, in emergency situations, have broad authority to authorize access to the Center for personnel, to represent their directorates in emergency operations, and to make certain management decisions. See Section 5.
- e. Emergency Preparedness – The condition of being prepared for emergencies, as a result of actions taken to reduce or eliminate risk to human life and/or property. In a crisis, it enables emergency personnel and responding professionals to provide a coordinated, comprehensive response to deal with and recover from emergencies.
- f. Emergency Preparedness Coordinator (EPC) – The individual responsible for managing the overall Emergency Preparedness Program Plan (EPPP). Responsibilities include developing an effective organizational structure, allocating resources, making appropriate assignments, managing information, and continually striving to improve the effectiveness of the plan.
- g. Emergency Preparedness Manager (EPM) – The individual with senior management responsibility for effective implementation of the EPPP. Reporting directly to the Center Director, this person makes the key decisions necessary to ensure a safe and proper response and recovery to major emergencies.
- h. Pre-Fire Plan – A document prepared by the FOM and updated annually, or sooner if/when significant changes in the facility or hazardous operations occur, that provides information about his/her building for firefighters and rescue personnel. The content of the Pre-Fire Plan is described in NASA-STD-8719.11.

## PROCEDURES

### 1. BACKGROUND

Many hazards have the potential to disrupt Center operations, cause damage, and/or create casualties. Natural hazards may include hurricanes, floods, tornadoes, fires, and winter storms. Other disaster situations could develop from a hazardous materials accident, conflagration, major transportation accident, civil disorder, or terrorism. There is also the threat of a war-related incident such as nuclear, biological, chemical, or conventional attack. Additional detail is provided in the Center's Hazard/Threat Identification Analysis (see 1.1).

The situations addressed by this procedure are those in which the actions of different organizations must be coordinated in an emergency to protect lives, property, and the environment, and to restore normal operations. This is accomplished by having the responding GSFC organizations manage and coordinate the use of internal and external resources in a planned, organized fashion. This coordination differs from the emergencies handled on a daily basis by local fire, security, public works, and medical services personnel.

Appendix A shows the GSFC application of the four phases of emergency management cited in NPG 8715.2: Mitigation, Planning, Response, and Recovery. The heaviest emphasis in the past was on planning for, and response to all risks: man-made emergencies, natural disasters, and attack. Equal

emphasis is now placed on mitigation and recovery to round out the four phases of comprehensive emergency management, providing a complete emergency plan for GSFC.

## 1.1 EMERGENCY SITUATIONS AND POTENTIAL HAZARDS

The Safety and Environmental (S&E) Division performs a hazard/threat identification analysis for GSFC. This analysis shows, in a hazard/threat identification table, the likely emergency situations that may impact the facility and evaluates the overall risks associated with these potential events. The analysis also identifies specific organizations responsible for leading the development of emergency preparedness plans and procedures for the various situations listed.

The table will be reviewed annually and updated as required. A sample table is shown in Appendix B. The table is used by the EMTG and others in planning emergency preparedness.

The table gives the following information based on the findings of the analysis:

- a. Likelihood – the probability of a specific hazard event occurring:
  - Negligible: Improbable or cannot occur
  - Low: Can occur, but no known history
  - Medium: Has happened in the past
  - High: Happens annually or more often
- b. Potential Loss – the impact on the facility, Center, or Agency if a hazard event occurs:
  - Insignificant: Minor interruption of work
  - Limited: Loss of workdays or temporary loss of building
  - Significant: Fatality or loss of building
  - Catastrophic: Loss of capability to perform Center or Agency mission
- c. Threat Ranking – the relative importance of the listed threats, based upon their likelihood and potential loss. Threat ranking uses the following matrix:

TABLE 1

Likelihood	Potential Loss			
	Insignificant	Limited	Significant	Catastrophic
Negligible	0	0	0	0
Low	1	2	3	4
Medium	2	4	6	8
High	3	6	9	12

## 1.2 ASSUMPTIONS

- a. GSFC has continuous exposure to the hazards noted in Appendix B, as well as others that may develop in the future.
- b. Outside assistance will be available in most emergency situations affecting the Center. Although this procedure defines steps for coordinating such assistance, GSFC should be prepared to carry out initial disaster response and short-term actions on an independent basis.
- c. Major disasters can occur at any time and at any place on the Center. In some cases, dissemination of warning and increased readiness measures may be possible. However, many disasters and events can occur with little or no warning.
- d. Senior management officials recognize their responsibilities for the safety and well being of employees and the public and will assume their responsibilities in the implementation of this emergency preparedness plan.
- e. Proper implementation of this procedure will reduce or prevent injury to people, loss of life, damage to the environment and/or facilities/equipment, and loss of designated function.

## 1.3 FOUR DOCUMENTATION SOURCES

- a. Emergency Preparedness Program Plan (EPPP) – This GPG explains the organizational and administrative structure of the GSFC emergency preparedness program, and the responsibilities of various individuals and organizations for emergency preparedness. The content of the EPPP is the responsibility of the EMTG.
- b. Functional PGs – Define how various Center functions (e.g., communications, security, public information) are utilized and interact during an emergency. Functional planning is assigned to specific organizations for Centerwide coordination and implementation. The PGs are discussed in Section 3.1.
- c. Hazard-Specific Procedures – Describe routine operational and administrative procedures specific to hazardous work, developed and implemented by various organizations with unique expertise in the hazard area.
- d. Contingency Procedures – Describe emergency operational procedures for mitigating a hazard. Examples might include plans for spill response in a chemical lab, power loss in a test facility, or cooling failure in a computer facility. Developing contingency procedures is the responsibility of the organization(s) directly involved.

## 1.4 EXTERNAL SUPPORT AND RESOURCES

- a. Support: Local, state, or Federal assistance is available and can be requested by the Center Director or designee.

b. Agreements and Understandings: During an emergency, assistance may be requested from other jurisdictions and agencies. Such assistance may be in the form of equipment, supplies, personnel or other capabilities. Every reasonable effort should be made to anticipate the need for such arrangements in advance of an emergency. Agreements, if needed, will be entered into only by the Emergency Preparedness Manager (EPM) or designee.

## **2. RESPONSIBILITIES**

### **2.1 CENTER DIRECTOR**

The Center Director has ultimate responsibility and authority for emergency preparedness. The Director has the following responsibilities:

- a. Ensuring development of plans to respond to, mitigate, and recover from emergencies;
- b. Developing plans that incorporate supporting local civil authorities in carrying out the mission, goals and functions of NASA; and
- c. Ensuring adequate planning for emergency operations within GSFC, including its offsite operations.

### **2.2 DIRECTOR OF MANAGEMENT OPERATIONS/EPM**

The Director of Management Operations is the EPM for GSFC, and has management oversight responsibility to ensure that an emergency preparedness program is implemented for all Center activities. The EPM will serve as the designated representative to the Federal Emergency Management Agency regional staff as set forth in NPD 8710.1. The EPM shall have the authority to elevate program issues through appropriate management, including direct reporting to the Center Director. The EPM represents the NASA Installation Director as defined in NPD 8710.1.

The EPM is responsible for:

- a. Designating the EPC;
- b. Designating the chair of the EMTG;
- c. Directing the overall emergency preparedness program for the Center;
- d. Communicating, through the Office of Public Affairs, information on emergencies for the purpose of informing the Center Director/management, employees, contractors, news media and the community;
- e. Providing budgetary and organizational support to the emergency preparedness program;
- f. Initiating and monitoring the increased readiness actions among Center services as necessary;
- g. Implementing emergency actions, such as activation of the Emergency Operations Center (EOC) as necessary and directing GSFC resources through the EOC; and
- h. Coordinating long-range recovery after a disaster.

<b>DIRECTIVE NO.</b>	<u>GPG 8710.2</u>
<b>EFFECTIVE DATE:</b>	<u>April 15, 2004</u>
<b>EXPIRATION DATE:</b>	<u>April 15, 2009</u>

## 2.3 EMERGENCY PREPAREDNESS COORDINATOR (EPC)

The EPC reports to the EPM, and is responsible for:

- a. Preparing and maintaining this directive to enable responsible Center personnel to develop, maintain, and exercise their respective plans, operating procedures, or organizational implementation of this procedure;
- b. Serving as staff advisor to the EPM on emergency matters;
- c. Coordinating the planning and general preparedness activities of the Center and apprising the EPM;
- d. Providing advice and assistance to Center personnel and contractors regarding emergency preparedness, response, and planning;
- e. Analyzing the emergency skills needed by the Center and identifying the training necessary to provide those skills;
- f. Preparing and maintaining an inventory of assets to support the program;
- g. Serving as a liaison between the Center and local emergency management organizations;
- h. Facilitating preparation and maintenance of emergency action plans, training plans, and supporting contingency plans for special equipment and facilities, such as the EOC;
- i. Supporting the GSFC vital records program as described in NPD 1440.6;
- j. Briefing appropriate senior management and Center officials concerning their roles in emergency preparedness;
- k. Arranging for mutual aid with outside jurisdictions, as required;
- l. Coordinating with the Prince George's County Fire Department resources and command structure, arranging them emergency access to all necessary Center information and resources;
- m. Receiving and disseminating warning information to senior management, public affairs, and employees, as requested; and
- n. Providing advice and assistance to other organizations in preparing their assigned Emergency Preparedness PGs or Work Instructions (WIs) .

## 2.4 EMERGENCY MANAGEMENT TASK GROUP (EMTG)

The EMTG members represent offices and directorates who have emergency planning responsibilities at GSFC. It includes representatives from each directorate, Facilities Management Division, Office of Public Affairs, Office of Chief Counsel, Office of Human Resources, Security Division, and others who may be called upon in a specific situation. Member organizations are responsible for emergency planning activities conducted within their respective organizations or specialties. The EMTG develops, coordinates, and implements GSFC's Emergency Preparedness Program.

Specific responsibilities include, but are not limited to:

- a. Developing and maintaining emergency preparedness plans, PGs, and procedures in accordance with NPG 8715.2;
- b. Operating and staffing the EOC;
- c. Reviewing facility operating procedures and EAPs;



- d. Proposing methods and evaluation tools for required annual emergency preparedness exercises/drills; and;
- e. Evaluating resources and preparation for emergencies at GSFC.

## **2.5 SAFETY AND ENVIRONMENTAL (S&E) DIVISION**

The S&E Division is responsible for:

- a. Preparing and maintaining Emergency Preparedness PGs or WIs as assigned;
- b. During incidents not requiring EOC activation, coordinating Center resources utilized in hazard mitigation;
- c. Verifying proper organizational planning and procedures for containing, controlling, cleaning up, and reporting hazardous spills or releases; and
- d. Contracting for a GSFC Medical Director responsible for:
  - (1) Coordinating planning efforts of the clinic and other health facilities with Center emergency preparedness requirements;
  - (2) Coordinating the Center's triage and first aid activities with P.G. County immediately after an incident occurs, as necessary;
  - (3) Coordinating Center's medical service resources, as necessary;
  - (4) Developing systems for reporting and compiling information on deaths and injuries;
  - (5) Developing emergency health and sanitation procedures; and
  - (6) Preparing and maintaining emergency preparedness PG , health and medical plan, and the supporting procedures.

## **2.6 SECURITY DIVISION**

The Security Division is responsible for:

- a. Monitoring daily security activities and situations to mitigate potential vulnerabilities;
- b. Providing direct liaison with the NASA Inspector General and law enforcement agencies during emergency operations;
- c. Performing initial assessment of emergency situations and damage;
- d. Maintaining employee location accountability procedures in emergencies;
- e. Providing security, traffic control, crowd control, and damage isolation during an emergency incident;
- f. Coordinating with the Prince George's Fire Dept. resources and command structure, and through the Division Chief, providing them emergency access to all necessary Center information and resources;
- g. Assuming the duties of the EPM, EPC, or both, in their absence;
- h. Acting as first-response incident commander, as required;
- i. Evacuating nonessential personnel from the incident areas and/or the Center as directed by the EPM;
- j. Preparing and maintaining assigned emergency preparedness PGs; and
- k. Preparing and maintaining the security plan, security procedures, incident management procedures, and other supporting procedures as required.



## **2.7 OFFICE OF PUBLIC AFFAIRS**

The Office of Public Affairs is responsible for:

- a. Promoting ongoing hazard awareness through employee communication programs;
- b. Preparing emergency information for the media in case of emergency;
- c. Handling inquiries from the media and the public;
- d. Preparing and maintaining assigned emergency preparedness PGs or WIs; and
- e. Notifying and disseminating information to Center employees, the media, and the public.

## **2.8 LOGISTICS MANAGEMENT DIVISION**

The Logistics Management Division is responsible for:

- a. Local transportation resources, their maintenance and their use in emergencies;
- b. Providing transportation equipment to Center organizations requiring augmentation;
- c. Ensuring availability of fuel and oil for vehicles under emergency conditions;
- d. Providing support for emergency operations through store stock, Center resources, or emergency procurement;
- e. Coordinating mutual aid agreements with EPC, as required; and
- f. Preparing and maintaining assigned emergency preparedness PGs or WIs.

## **2.9 FACILITIES MANAGEMENT DIVISION**

The Facilities Management Division is responsible for the following pre-emergency activities:

- a. Ensuring the application of codes, standards, and regulations in design and construction activities;
- b. Arranging for mutual aid with outside jurisdictions, as required;
- c. Preparing and maintaining assigned emergency preparedness PGs;
- d. Preparing and maintaining contingency procedures for such events as but not limited to hurricanes, severe weather, interruption of utilities, and snow emergency, and supporting procedures; and
- e. Ensuring that site plans, utility drawings, etc., are kept up to date.

In an emergency situation, the Facilities Management Division is responsible for the following:

- a. Providing a skilled damage-assessment team as required who will assist in determining extent of damaged area;
- b. Compiling cost estimates of damage repairs as required;
- c. Evaluating the effect of damage on Center facilities and facilitating long-range recovery planning;
- d. Determining recovery times of affected utility systems; and
- e. Returning Center to operational status, including
  - (1) Barricading hazardous areas;
  - (2) Restoring streets and bridges in priority order;
  - (3) Protecting and/or restoring waste treatment and disposal systems;

- (4) Augmenting sanitation services;
- (5) Removing debris;
- (6) Restoring electrical service to vital facilities;
- (7) Directing temporary repair of essential facilities;
- (8) Restoring emergency power sources as required;
- (9) Restoring water treatment and supply services; and
- (10) Condemning unsafe structures.

## **2.10 INFORMATION SERVICES DIVISION**

The Information Services Division is responsible for:

- a. Establishing and maintaining a system that will provide reliable communications during emergencies;
- b. Coordinating use of all public and private communication systems necessary during emergencies;
- c. Managing and coordinating all emergency communication operations of the EOC when activated;
- d. Assessing damage to communication systems and coordinating repair and restoration;
- e. Coordinating mutual aid agreements with EPC, as required; and
- f. Preparing and maintaining assigned emergency preparedness PGs and supporting procedures.

## **2.11 OFFICE OF THE COMPTROLLER**

The Office of the Comptroller at Greenbelt is responsible for:

- a. Developing procedures for establishment of disaster contingency funding; and
- b. Maintaining records of emergency-related expenditures.

## **2.12 OFFICE OF HUMAN RESOURCES**

The Office of Human Resources is responsible for:

- a. Developing procedures (with Office of the Chief Financial Officer) to pay salaries and benefits during extended interruptions of normal Center operations;
- b. Assisting with inquiries from family and relatives concerning employee injuries or fatalities; and
- c. Preparing and maintaining human services PG and supporting procedures.

## **2.13 OFFICE OF CHIEF COUNSEL**

The Office of Chief Counsel is responsible for providing legal advice and assistance to management during emergency situations.

## **2.14 FACILITY OPERATIONS MANAGERS (FOMs)**

The FOMs are responsible for:

- a. Preparing the EAP for their assigned building;
- b. Serving as primary point of contact for matters related to a given building or worksite;
- c. Planning and coordinating emergency building evacuations; and
- d. Preparing the building pre-fire plan, with guidance from the S&E Division. The FOM will submit the plan to Codes 240 and 250 annually, and place an updated copy in the fire department information box outside each building.

## **2.15 DIVISION/LAB CHIEFS**

Supervisors are responsible for ensuring that personnel understand their current EAPs and fully participate in building evacuation drills and exercises. Organizations not assigned a specific function in this procedure will be prepared to make their resources available for emergency duty at the direction of the EPM. Division Chiefs of organizations that conduct hazardous operations (e.g., chemical labs, plating facility) or mission-critical operations are also responsible for:

- a. Developing hazard-specific procedures, functional plans, support arrangements, and contingency plan procedures;
- b. Developing detailed emergency response procedures as requested by the EMTG. Information derived from this planning will be available for use or reference in the hazard-specific procedures; and
- c. Participating in drills and other relevant emergency training.

## **2.16 ALL EMPLOYEES**

All employees are critical to the immediate response to any emergency. As such, employees assist in emergency preparedness by:

- a. Knowing and following procedures for reporting emergencies;
- b. Knowing and following specific procedures contained in building EAPs, project plans, and other emergency management-related documents relevant to an individual's duties;
- c. Coordinating with others near their worksite who might be affected by operations; and
- d. Participating in drills and other relevant emergency training.

## **3. FUNCTIONAL RESPONSIBILITIES**

### **3.1 EMERGENCY PREPAREDNESS FUNCTIONAL PGs**

NPG 8715.2 requires development of a series of emergency preparedness functional plans, or PGs, as identified in Table 2. The table also identifies the organizations with primary responsibility for these

functions, and for issuing and maintaining these plans. Functional plans and hazard-specific procedures, as defined herein, shall be developed by the assigned organizations, and reviewed by the EMTG prior to release on the Goddard Directive Management System.

**TABLE 2**

<b>PG Identifier</b>	<b>Plan Name</b>	<b>Responsible Organization</b>
A	Direction and Control	200
B	Communications	290
C	Warning/Alerting	250
D	Emergency Public Information	130
E	Evacuation	250
F	Reception and Care	250.9
G	Sheltering	200
H	Health and Medical	250.9
I	Security	240
J	Facilities	227
K	Fire and Rescue	250
L	Radiological Protection	250
M	Human Services	110
N	Logistics, Transportation, and Supply Support	230
O	Damage Assessment	220
P	Search and Rescue	250
Q	Hazardous Materials Response	250
R	Emergency Operations Center	201
S	Utilities	220
T	MOUs, MOAs, and Joint Operating Procedures	201
U	National Security Emergency Preparedness Plan	240

### 3.2 ACTIVATION

In an emergency, the EPM, EOC, or designee will call upon designated organizations (see Section 2), and may activate the EOC as a base of operations.

Given the need for a single point of contact/responsibility during an emergency, specific responsibilities are assigned. The EPM may designate alternate leads based on the situation and the personnel available.

### 3.3 INCIDENT MANAGEMENT

GSFC shall use the Incident Management System as defined in NASA-STD-8719.11. Code 240, Security Division, is responsible for incident management and shall maintain documented procedures to meet incident management requirements.

#### 4. DRILLS

The EPC, in concert with the EMTG, will oversee the conduct of drills and exercises, at least one per year, to assess the Center's state of emergency preparedness. The EMTG will select the type of exercise, schedule it, monitor its execution, and assess the outcome with respect to this directive, supporting PGs, and other organizations' responsibilities. Proper execution of this GPG during a legitimate emergency will have the effect of verifying the GPG's functionality and will carry the same weight as a scheduled drill or exercise. Revisions will be made as required based on "lessons learned" during debriefings with emergency responders, FOMs, and employees following such exercises or actual emergencies.

The EPC will establish metrics for the drills, and report to the EPM on the final effectiveness of the exercises. The report will be maintained as a record as shown in P.8.

#### 5. CRITICAL AND EMERGENCY PERSONNEL LIST DESCRIPTION

The term "critical personnel" can be applied to a wide variety of employees, based on the situation(s) being faced by the Center at any given time. In order to simplify access control during special situations and to respond effectively to emergencies, we identify two types of personnel that could be classified as "critical," and a third type that would be considered "emergency personnel."

***Critical and emergency personnel are listed on the Safety 1st Web site. Security grants access to personnel on these lists as described below. These lists are issued and controlled by the EMTG, with expiration dates 12 months from issue. This provides a regular update process. Security will not permit access to the Center based on out-of-date lists.***

##### 5.1 CRITICAL PERSONNEL: TWO TYPES

All critical personnel are admitted to the Center at any time unless Security is specifically directed to close the Center to these people.

a. Core Operations: These are the workers who routinely work critical functions that are carried out 24 hours a day, 7 days a week, 365 days a year, including weekends, holidays, and non-core hours. They are required to remain on station in the event that relief personnel are not available. These are the employees who must report for work on time during snow and other Center "emergencies" – times when the Center would be considered "closed." As such, in the event of another 9/11-like incident – unless circumstances are so grave that the Center would be willing to consider ceasing 100% of all operations on Center – all of these employees would be considered critical. They include a mix of Code 200 personnel, Mission Operations personnel, and personnel from other directorates who are performing critical core operations functions.

b. Situation-Related: The Center has additional individuals who are considered critical in the event of emergencies such as snow and hurricanes, launch support, mission operations problems, essential testing, etc. These people would need to be included in any comprehensive listing of personnel in the

event that a 9/11-like event was further complicated by a weather-related emergency or a mission-critical situation.

## **5.2 EMERGENCY PERSONNEL**

EMTG members are considered “emergency personnel” at all times, and are admitted to the Center under any conditions. All Directors Of and their deputies shall be included in this group, in addition to a small group of personnel designated by Code 200. Directors Of and EMTG members are granted broad authority to authorize access to the Center for additional personnel.

## **APPENDIX A: FOUR PHASES OF EMERGENCY MANAGEMENT**

This procedure follows an approach common to any emergency situation and acknowledges that most responsibilities and functions performed during an emergency are not hazard-specific. As such, planning for each type of hazard leads to the development of a standardized emergency preparedness system. This procedure accounts for activities before, after, and during emergency operations in the four phases addressed below.

### **1. Mitigation**

Mitigation activities eliminate or reduce the probability or severity of a disaster. They also include long-term activities that lessen the undesirable effects of unavoidable hazards. Mitigation can include:

- a. Identifying critical resources and facilities for protection;
- b. Use of codes, standards, and regulations to aid in limiting “built-in” risk;
- c. Implementing warning and/or alert systems;
- d. Deterrent systems, such as perimeter fencing or visible security;
- e. Active safety and training programs; and
- f. Management decisions to mitigate risks, such as limiting quantities of hazardous chemicals, or storing hazardous materials in remote locations.

### **2. Planning**

Planning activities develop the necessary and critical response capabilities needed before an emergency event arises. Planning and training prior to an emergency are primary activities conducted under this phase. Preparedness can include:

- a. Hazard/threat identification and analysis;
- b. Contingency plans;
- c. Implementation of post-incident evaluation and corrective action plans;
- d. Equipment, facility, budget, and supply requirements;
- e. Identification of coordination requirements with Federal, state, and local plans;
- f. Education and awareness training; and
- g. Exercises and annual drills.

### **3. Response**

Response includes the actions taken by emergency services during an incident or crisis. These activities help to reduce casualties and damage, and speed recovery. Response activities include warning, evacuation, rescue, and other similar operations, and may include:

- a. Activation of Emergency Response Teams;
- b. Activation of the EOC and/or alternate EOC;
- c. Use of Incident Command System;



- d. Coordination with local, state, and Federal agencies;
- e. Recall and notification of key personnel; and
- f. Damage assessment.

#### **4. Recovery**

Recovery is both a short- and long-term process. Short-term operations restore vital services to the Center. Long-term recovery restores the Center to normal operations. The recovery period is also an opportune time to institute mitigation measures, especially those related to the current or anticipated future emergencies. Recovery requirements may include:

- a. Examples of short-term activities
  - (1) Restoration of vital communications services;
  - (2) Damage assessment;
  - (3) Temporary relocation of offices disrupted due to structural damage; and
  - (4) Reconstruction of damaged areas.
- b. Examples of long-term activities (includes assessment of mitigation and preparedness)
  - (1) Lessons Learned/Corrective Action Plans;
  - (2) After-Action Reports; and
  - (3) Recovery Actions (long term).

**DIRECTIVE NO.** GPG 8710.2  
**EFFECTIVE DATE:** April 15, 2004  
**EXPIRATION DATE:** April 15, 2009

**APPENDIX B: SAMPLE GREENBELT HAZARD/THREAT IDENTIFICATION TABLE**

POSSIBLE HAZARD	LIKELIHOOD	LOSS POTENTIAL	THREAT	RESP. CODE	EXAMPLES
Terrorism	Low	Significant	3	240	
Bomb Threat/Explosion	Med	Significant	6	240	
Civil Disorder	Low	Limited	2	240	
Hostage Situation	Low	Limited	2	240	
Tornado	Med	Catastrophic	8	220	
Lightning	High	Significant	9	220	Strike on substation/offsite PEPCO facility.
Hurricane	Med	Catastrophic	8	220	
Winter Storm	High/low	Limited / significant	6/3	220	Long-term affects fuel and PEPCO power
Flooding	Med	Significant	6	220	Interior flooding due to utilities
Fire, Structural	High	Significant	9	250	Interact with PG County (local service provider)
Fire, Other	High	Limited	6	250	Interact with PG County (local service provider)
Hazardous Mat. Incident	High	Limited	6	250	Interact with PG County (local service provider)
Personal Injury Accident	High	Limited	6	250	Interact with PG County (local service provider)
Mass Casualty Incident	Low	Significant / catastrophic	3/4	250	Interact with PG County (local service provider)
Transportation Accident	Med	Limited	4	250	Interact with PG County (local service provider)
Aircraft Crash (on-site)	Low	Catastrophic	4	250	Interact with PG County (local service provider)
Aircraft Crash (NASA off-site)	Low	Significant	3	250	Off-site incidents east of Bay are WFF responsibility.
Radiological Incident	Low	Significant	3	250	
Utility Shortage/Failure	Med	Significant / catastrophic	6/8	220/240	Power, telephone, radio, Center Network Environment, cooling water
Road/Bridge Failure	Low	Significant	3	220	
Water Supply Contamination	Low	Significant/ catastrophic	3/4	220	WSSC potable water source contamination
Unsafe Structure (Bldg)	Low	Significant	3	220	

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT  
<http://gdms.gsfc.nasa.gov/gdms> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

**DIRECTIVE NO.** GPG 8710.2  
**EFFECTIVE DATE:** April 15, 2004  
**EXPIRATION DATE:** April 15, 2009

Page 18 of 18

### CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	04/15/2004	Initial Release

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT  
<http://gdms.gsfc.nasa.gov/gdms> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.